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An Exploratory Study on the Factors Affecting the Mental Health and Well-being of Frontline Workers in Homeless Services

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Abstract

Frontline workers in homeless services work in a high-intensity, emotionally consuming environment, with frequent exposure to traumatic material with potentially significant consequences for their own mental health. This, in turn, may have a negative impact on the quality of care provided to homeless service users. Prevention of this trajectory may be achieved through psychologically informed environments for staff. This study aimed to explore factors that may influence the development of burnout, secondary traumatic stress (STS), depression, anxiety, and stress in this population. Elevated levels of burnout and STS were predicted, as was an association between the predictor variables of professional experience, educational background, continuing professional development, access to organizational support structures, and the outcome measures of compassion satisfaction, burnout, STS, depression, anxiety, and stress. An online cross-sectional survey design using The Professional Quality of Life Scale (Version V) and the Depression Anxiety and Stress Scale-21, and scales designed for this study capturing occupational variables was distributed via email and national networks to a wide range of services across Scotland and the rest of the UK. Over four months in 2017, 112 frontline homelessness workers in health, social care and third sector organizations completed the survey. Results did not indicate elevated levels of burnout or STS, though depression and stress were found to be significantly elevated compared to population norms, and were associated with burnout, compassion satisfaction and secondary traumatic stress. High levels of various types of supervision support and CPD were identified. There was no association between these and burnout or stress. We highlight the elevated levels of stress and depression and make a research recommendation to parse types of supervision to assess for optimal effectiveness and efficiency in ensuring that staff working in high-stress homelessness settings receive optimal support to deliver high quality services.

295 words

Keywords

homelessness; psychologically informed environments, secondary trauma, frontline workers, depression, stress

What is known about this topic

1. The complex problems of homeless people make engagement and intervention challenging
2. Workers in helping professions are vulnerable to psychological distress including secondary traumatic stress (STS)
3. STS has been linked to negative working practices, such as loss of empathy, in workers

What this paper adds

1. Homelessness practitioners experience elevated levels of depression and stress compared to the general population
2. Neither age, access to training, type of supervision and support, nor qualifications predicted depression or stress; high levels of support may have mitigated effects
3. Compassion satisfaction was negatively correlated with all other psychological variables, suggesting that belief in the value of working with homeless people may be protective

118 words, including headings

Of the 28,247 Scottish households assessed as homeless in 2016-2017, 44% ($N = 12,462$) were identified as having at least one support need, including difficulties with household management, substance misuse problems (25%), mental health issues (45%), or serious medical conditions (National Statistics, 2017). The Scottish Government has increased its focus on supporting homeless people with multiple and complex needs (Fitzpatrick *et al.*, 2015), who are generally both vulnerably housed and excluded from mainstream society through their involvement in substance misuse, institutional care and “street culture” (begging, sex work, etc.) (Fitzpatrick, Bramley, & Johnsen, 2012). Many multiply excluded homeless people have experienced childhood trauma contributing to poor mental health outcomes and substance abuse that contribute to long-term homelessness and social exclusion as well as further adverse life events (McDonagh, 2011). Furthermore, being homeless involves an inherent risk of re-traumatization; 60% of homeless participants in an Australian study identified homelessness as an intrinsically traumatic experience (Deck & Platt, 2015).

It follows that staff working in homeless services must possess diverse skills to effectively support clients, whilst also recognizing that their service users may have a complicated relationship with care. As multiply excluded homeless people often have chaotic lifestyles and the individual services they use (e.g. housing, health services, substance abuse services) may not always be equipped to meet all their needs, they frequently rely on knowledgeable, caring, and skilled frontline workers within homeless drop-in and outreach services who can respond to crises with sensitivity.

When combined with organizational and environmental pressures, staff report “burnout”, referring to issues such as funding restrictions, being emotionally exhausted, difficult shift patterns, unmanageable caseloads, or dealing with an unsupportive organizational culture (Azar, 2000; Lloyd, King & Chenoweth *et al.*, 2002; Bell *et al.*, 2003; Osofsky *et al.*, 2008; Kulkarni *et al.*, 2013). Austerity measures, anti-begging legislation, and negative public

perceptions of rough sleepers (Mullen & Leginski, 2010) and welfare recipients mean that working in homelessness can often be a political role that involves advocacy even outside working hours. The joint endeavor of staff and service users to survive in a societal system that is arguably designed to promote exclusion (Scanlon & Adlam, 2011) influences and is influenced by professional identity, ownership of this identity and shared identity between staff and service users. This reflects an interweaving of identities, contexts and systems that overlays the homeless individual's needs and experiences. Working in this context can lead to the development of compassion fatigue, which includes burnout due to work-related stress and vicarious trauma through overexposure to human suffering. Eventually, this may lead to practitioners feeling less empathy for their clients, dissatisfaction with their role (Adams *et al.*, 2006; Berzoff & Kita, 2010; Geoffrion *et al.*, 2016), and low motivation, which will have a direct effect on the quality and quantity of support provided to a service user (Figley, 2002). Conceptualized as an 'emotional retreat' from engagement, this will exacerbate the experience of social exclusion for the service user (Chamberlayne, 2004).

Practitioners working in caring roles have been found to have higher levels of stress and depression (Evans *et al.*, 2005; Stanley *et al.*, 2007; Kim *et al.*, 2011). Working in a frontline homeless service also exposes staff members to secondary traumatic stress (STS) resulting from exposure to high levels of traumatic material (and sometimes to first-hand trauma, through violent incidents with service users). The symptoms of STS closely mirror diagnostic criteria for posttraumatic stress disorder (PTSD) (Figley, 1995; Bride, 2004, 2007; Kanno, 2010; Hensel *et al.*, 2015;), especially hypervigilance, vivid memories or dreams involving the traumatic material, and seeking to avoid internal or external cues that may trigger feelings linked to the traumatic material (Bride, 2004; Baird & Kracen, 2006; Kanno, 2010).

Many survivors approach therapeutic relationships with mistrust and struggle to form a positive working alliance (Conrad & Kellar-Guenther, 2006; Knight, 2008; Knight, 2013); for

practitioners, this may increase the risk of developing compassion fatigue due to continued frustrations and challenges when trying to engage with service users who struggle to move forwards and have complicated relationships with care (Burley, 2016; Knight, 2013), risking a further negative relationship experience for the survivor. Evidence suggests that compassion fatigue and STS compromise ‘compassion satisfaction’: the experience of deriving emotional fulfilment from helping others, or feeling positive emotions as a result of supporting those who are suffering (Stamm, 2002; Salloum *et al.*, 2015; Wagaman *et al.*, 2015). Compassion satisfaction may be protective against both burnout and STS for practitioners (Conrad & Kellar-Guenther, 2006); however, this effect is limited if compassion fatigue and STS levels are already overly elevated (Thomas, 2013; Salloum *et al.*, 2015).

Past research has shown mixed results regarding the influence of practitioner variables on the development of STS (see Bride, 2004, for a review). Practitioner age and professional experience shows an inconsistent relationship with STS, with evidence suggesting that younger and less experienced practitioners are more likely to present with psychological distress and symptoms of STS (Pearlman & MacIan, 1995; Bride, 2004; Adams *et al.*, 2006; Kulkarni *et al.*, 2013), and that more experience in clinical practice and use of evidence-based interventions helps predict increased levels of satisfaction in workers (Craig & Sprang, 2010); but also that older practitioners report higher levels of distress than younger counterparts (Bride, 2004; Baird & Kracen, 2006; Salloum *et al.*, 2015). How long practitioners have been working in psychosocial services may have less influence on compassion fatigue than the length of time spent working specifically in psychological trauma services (VanDeusen & Way, 2006).

Overall, research suggests that when working in a role that involves repeated exposure to psychological trauma, STS and vicarious traumatization may be an occupational hazard that services should prepare for and equip themselves to respond to (Pearlman, 1995; Hesse,

2002; Adams *et al.*, 2006; Bober & Regehr, 2006; Bride, 2007; Knight, 2008).

Psychologically informed practice or environments (PIE; Keats *et al.* (2012)) provides a response to this. Over the past five years, homelessness services have begun transitioning towards formally implementing psychologically informed practice as a standard (Levy & Johnson, 2018), thus recognizing their service users' psychological needs and how they affect their day-to-day experiences and engagement with services (Keats, et al., 2012). This reflects Scanlon & Adlam's (2012) assertion that in the high-stress homelessness practice environment, there is a specific risk of staff retreating from support structures such as supervision and team meetings unless measures are put in place.

One of the five key areas of developing PIE as an approach to working in homelessness is staff training and support, featuring reflective practice (Keats *et al.*, 2012). A range of different group discussion settings allow for this. Reflective practice groups (RPG) provide space for staff to process their experiences with colleagues and discuss alternative ways forwards to better support service users (Cockersell, 2011). Case review groups (CRG) may focus on specific interactions with a client, often with support from an external clinically trained consultant to develop psychological formulations for observed behavior and relational styles (Burley, 2016). Communities of practice (COP) bring together frontline practitioners from different services to collaborate on case reviews and support plan development for shared clients who already access several services or are suitable for referral (Anderson *et al.*, 2013), and are particularly appropriate for supporting clients with multiple complex needs (Cornes *et al.*, 2013). COP have the added benefit of acknowledging other organizations' ways of working, which may be beneficial in reducing stress, burnout, or STS, and creating a broader supportive peer network for practitioners (Scanlon & Adlam, 2012). The benefits of PIE are still being researched, but the premise is that a greater understanding of psychological trauma and its impact on their clients allows staff members to feel more confident in

positively responding to challenging behavior (e.g. Archard & Murphy, 2015) and to better recognize signs of burnout and compassion fatigue in themselves and peers (Hopper *et al.*, 2009; MEAM & Calouste Gulbenkian Foundation, 2015; Prestidge, 2014).

The constellation in homeless people of complex trauma histories and needs, current problems, and difficulties accepting help could contribute to higher levels of compassion fatigue in this population of practitioners. Understanding the relationship between forms of organizational support and supervision and the emotional toll of support work with this group would be an important contribution to the literature, which has thus far minimally studied the mental health of frontline homelessness practitioners.

This research therefore seeks to understand how frontline homelessness practitioners are affected by the work that they do with people with complex needs. We ask how educational background, CPD, and quality of formal workplace support structures associate with outcome measures like compassion satisfaction, burnout, and STS, with the following hypotheses:

- 1) frontline homelessness practitioners will have elevated levels of burnout and/or STS in relation to population norms;
- 2) There will be an association between professional experience, educational background, CPD, and/or quality of organizational support structures, and symptoms of psychological distress (depression, anxiety, stress, STS, burnout, compassion satisfaction).

Methods

This was an observational cross-sectional survey design. Participants were recruited from statutory and third sector services for homeless or vulnerably housed people, including drop-in centers, health services, and accommodation services. To be eligible to participate, staff needed to be: 1) working or volunteering for a minimum of 10hr/week in a client-facing role in a service for homeless or vulnerably housed people; 2) working in the organization for at least three months. These criteria were chosen so relief or part-time staff working more than

one standard 7-8 hour shift per week would be eligible and more senior staff balancing client-facing hours with management roles could still participate, whilst ensuring a baseline frequency of exposure to the working environment.

The web-based survey was widely disseminated via social media. The researcher also contacted several services to request dissemination of the study in their place of work. The study was presented at a local event on frontline staff mental health and well-being organized by a national homelessness organization, which disseminated the survey through their website and monthly newsletter.

An a-priori power analysis using four predictors (years of experience, educational background, CPD, and support score) established a required sample size for the multiple regression of $N = 84$ in order to have a medium effect size with power $= .80$ and $\alpha = 0.05$ (Soper, 2017).

Ethics approval for the study was obtained from the University's Ethics Committee. The survey was hosted on the Bristol Online Survey platform; participants consented by clicking through to the survey after reading an information page outlining the aims of the study, risks and benefits of participation, and contact information. The survey took approximately 15 minutes to complete.

Measures

Demographics and Work Context

Gender, ethnicity, age, location, and job title were collected. Participants were also asked about their years of experience working with vulnerable people, access to relevant CPD (e.g. in mental health, on self-harm/suicide prevention etc.), academic and vocational training, and access to formal support at work.

Questions on formal support at work specifically explored support structures usually offered in social care organizations (i.e. Supervision), and other more recently introduced forms of support used within the “Psychologically-Informed Environments” framework.

Compassion Satisfaction, Burnout, and Secondary Traumatic Stress (STS)

Professional Quality of Life (ProQOL) - Version V Questionnaire (Stamm, 2010): This 30-item scale has three 10-item subscales that study compassion satisfaction, burnout, and STS, with a five-point response scale. Internal consistency for each subscale is high, with Cronbach's alphas of .81 for STS, .75 for burnout, and .88 for compassion satisfaction (Stamm 2010). The ProQOL has been used in research with clinical social workers, mental health professionals (Sprang *et al.*, 2007), and trauma therapists (Craig & Sprang, 2010). All subscales had good internal reliability in this study, with Cronbach's alpha value of .81 for STS, .74 for burnout, and .90 for compassion satisfaction.

Depression, Anxiety, & Stress Scale

Depression, Anxiety & Stress Scale (DASS-21): a 21-item form of the original 42-item scale (Lovibond & Lovibond, 1995) was used. This 4-point Likert scale explores depression, anxiety, and stress in three subscales. The scale has been found to have good internal consistency, with Cronbach alpha values of .88 for depression, .82 for anxiety, and .90 for stress (Henry & Crawford, 2005). The individual subscales in this study had good internal reliability, with Cronbach's alpha variables of .87 for depression, .80 for anxiety, .86 for stress. The scale has been validated in both clinical and non-clinical populations (Crawford & Henry, 2003; Nieuwenhuijsen *et al.*, 2003; Dahm *et al.*, 2013), and is well-suited for use within occupational health settings (Dorrian *et al.*, 2017).

Statistical Analysis

SPSS version 22 was used to conduct quantitative data analyses. Outliers were kept as they fell within clinical cut-offs (Lovibond & Lovibond, 1995; Stamm, 2010). Responses with missing values were removed list-wise.

Educational background was calculated as a summed score of a participant's highest level of vocational education achieved added to their highest level of academic education, based on the credit weighting allocated in the Scottish Credit and Qualifications Framework (see Supplementary table 1 for coding scheme).

Access to CPD was quantified as a scale from 0-10, with participants awarded 2 points for each type of 5 possible trainings accessed in the last 12 months, 1 point for training accessed “ever”, and 0 points for never accessed. Quality of support received at work was computed per the formula: $\text{SupportQuality} = (\text{SupportFrequency} \times \text{SupportSize}) + \text{LeaderBonus}$, with participants receiving higher scores for more frequent, small group support. A “leader bonus” allowed for additional points to be added based on who facilitated the support. See Supplementary Table 2 for detailed scoring scheme, and Figure 1 for distribution of CPD experience.

Following descriptive analysis, correlational analyses were used as a preliminary test of associations between all variables. Multiple regression analyses were then planned to explore the relative relationships between the occupational predictor variables and psychological distress.

Results

A total of 112 participants aged 23 to 62 years ($M = 41.0$, $SD = 10.33$) responded to the survey. Responses were collected over a period of four months (March-July 2017) and came predominantly from Scotland (73.2%); 25% of respondents were from the rest of the UK, and 1.8% from outside the UK. The sample was 65.2% female. Respondents came from a wide

range of homelessness-related professions, different levels of seniority, and were grouped into broad categories to avoid identification. Participants' educational background was mixed, with approximately a third of respondents having only vocational training, a third having only academic training, and a third having a combination of vocational and academic training (see Table 1).

Insert Table 1 here

Table 2 shows the breakdown of support frequency, group size, and support facilitator for each of the forms of organizational support studied. The results highlighted that 77.5% have access to supervision on at least an occasional basis, and that for 83%, supervision is individual; 87.5% of respondents who have supervision have it facilitated by their team leader. Most participants also participated in Reflective Practice or Case Review Groups at least occasionally (62.5% and 58.9% respectively). A third ($n=38$) of respondents had never received training on psychological trauma and domestic violence.

Insert Table 2 here

Insert Figure 1 here

Data preparation

The mean t-score for all ProQOL subscales were 50.00 ($SD=10.00$). These results are consistent with literature values for the ProQOL scale and are comparable to those found in a similar study (Salloum *et al.*, 2015). The sample was categorized according to cut-off scores for the ProQOL-V (Stamm, 2010). The majority of the sample (71.4%) described average levels of compassion fatigue, with 27.7% describing high levels. All the participants had either low or average levels of burnout and STS; there were no participants whose scores fell within the "high" cut-off range for either burnout or STS (see Table 3).

Insert Table 3 here

The mean score for the depression subscale in the DASS was 3.57 ($SD=3.51$), the mean score for the anxiety subscale was 1.86 ($SD=2.65$), and the mean score for the stress subscale was 5.52 ($SD=3.93$). The mean values for the depression and stress subscales were significantly higher than published general population norms (Crawford *et al.*, 2011; see Table 4).

Insert Table 4 here

Preliminary analyses to assess normality were run using normal Q-Q plots and the Shapiro-Wilk test of normality. All sub-scales were significantly non-normally distributed with negative skews and kurtosis for all ProQOL subscales and positive skews and kurtosis for all DASS subscales. Observation of the normal Q-Q plots and histograms for each of the subscales confirmed the statistics; given the spread of the data, we used non-parametric correlational analysis. Bootstrapping was used throughout to limit the effect of the non-normality, based on 1000 bootstrap samples.

Analysis

A one-sample t-test, which is fairly robust to deviations from the norm (Posten, 1979), was run to test the first hypothesis and determine whether scores for burnout and STS in recruited participants were elevated as compared to those in similar samples. The scores for burnout and STS were not significantly elevated compared to scores found in a similar survey (Salloum *et al.*, 2015), with $t(108)=-.125, p=.901$ and $t(108)=.104, p=.945$ respectively. Therefore, the first hypothesis was not supported.

Spearman's correlations were run to explore the relationship between the key variables of professional experience, CPD, educational background, and quality of organizational support, and the outcome measures of compassion satisfaction, burnout, STS, depression, anxiety, and stress. Scatterplots indicated monotonic relationships between the relevant variables.

There were no significant correlations between age, gender, or years of professional experience and any of the subscales for the Professional Quality of Life Scale, the Depression & Anxiety Scales, or the composite DASS score. There were also no significant correlations between the outcome variables and any of the following: education level, amount of CPD; and overall support score. Therefore the second hypothesis was unsupported.

Post-hoc analysis

Correlational analyses were run between the outcome measures to further explore the relationships between these variables (see Table 5).

This analysis showed a strong negative correlation between compassion satisfaction and both burnout ($r = -.649, p < .0005$) and depression ($r = -.539, p < .0005$). There was a moderate negative correlation between compassion satisfaction and STS ($r = -.338, p < .0005$), and stress ($r = -.426, p < .0005$). Compassion satisfaction was weakly negatively correlated with anxiety ($r = -.240, p = 0.013$). The analysis also indicated strong positive correlations between the burnout and STS, depression and stress subscales (r range = .529 - .617, $p < .0005$).

The analysis further indicated a strong positive correlation between burnout and STS ($r = .583, p < .0005$), depression ($r = .617, p < .0005$), and stress ($r = .529, p < .0005$). A moderate positive correlation was found between burnout and anxiety ($r = .356, p < .0005$). STS had a moderate positive correlation with each of the subscales on the DASS (r range = .383 to .480, $p < .0005$). Lastly, all the DASS subscales had strong positive correlations with each other (r range = .591 to .716, $p < .0005$).

Insert Table 5 here

Discussion

The results of this study showed no significant associations between the hypothesized predictor variables of professional experience, education level, CPD, access to organizational support, and symptoms of psychological distress (depression, anxiety, stress, STS, burnout,

compassion satisfaction). These findings are not strictly inconsistent with existing literature on the subject: while variables such as access to relevant training, regular supervision and appropriate debriefing have been shown to predict lower levels of burnout and STS in similar populations (Lloyd *et al.*, 2002; Ben-Porat & Itzhaky, 2011), research on the relationship between practitioner age and psychological distress varies as noted earlier. These results suggest that further research should continue to investigate what factors may affect the development of burnout and STS.

The significantly elevated levels of depression and stress we found fits with existing literature that highlights raised levels of psychological distress, including depression and stress, within populations working in similar roles (Stanley *et al.*, 2007; Kim

et al., 2011; Ting *et al.*, 2011). The literature also supports our finding of an association between burnout and STS and other measures of psychological distress. These results further support the suggestion that there is a constellation of psychological distress or dissatisfaction within the population of frontline workers in homelessness, but that our proposed work-place based predictors cannot provide an explanation for this phenomenon.

Strengths and Limitations

While research frequently evaluates education level based on highest level of education achieved (Schneider, 2011; Connelly *et al.*, 2016), due to the diverse range of skills required in frontline homelessness working, for which a single educational training route has not yet been defined, participants were instead given a summed score based on their highest level of academic qualification and their highest level of vocational training combined. This allowed for a more nuanced scoring of educational background. This method is easily applicable to other research contexts, including ones with multiple vocational education systems, and offers an effective way of capturing educational background for a sample that is composed of people with varied qualifications.

This survey collected responses from participants at various levels of organizational hierarchy, with 26.8% ($N = 30$) participants being in middle or upper management, allowing for results that are representative across an organization. We did not differentiate type of work or working hours per week in our analysis, which may have contributed to there being no association between professional experience and the experimental variables. We therefore cannot add clarity to the currently mixed findings but suggest that within ‘experience’ there are a host of interacting factors including hours worked per week, contact hours, work-life balance, life experience and work experience.

Homelessness services are widely dispersed across the health and social care sector and the third sector in the UK, with services increasingly devolved from the statutory sector. Consequently, there is no unified information about the workforce, and it is difficult to establish the generalizability of our sample. Overall, the female gender is over-represented in work with vulnerable groups and associated professions (78.3% of local authority social workers were female in 2016 (Anon, 2017), and Franklin (2014) reports that 80% of the UK care workforce is female), so we may hypothesize that our gender imbalance is representative. A caveat to this is the finding across research that women are more likely to volunteer to participate in surveys, including web surveys (Smith, 2008). Therefore, our gender imbalance may be an artefact of the study design. A cohort design within a smaller range of services would have allowed for systematic assessment of generalizability, although care would be needed to ensure that participants could be assured of anonymity and that included services were representative of the sector.

For both measures, there were certain clear outliers whose scores fell above the 75th percentile for the burnout or STS subscales of the ProQOL (indicating high levels of distress), or scores within either the clinical cut-offs (Lovibond & Lovibond, 1995) for more than one sub-scale of the DASS. The presence of such outliers suggests potential responder

bias, where frontline staff who were particularly struggling with their mental health or emotional well-being may have chosen to take part as they had a greater interest in the experiences being studied. As the survey was opt-in, and despite the representative sample we appeared to capture, we cannot rule out sampling bias. We addressed the potential implications of this by testing all demographic and occupational variables against the experimental variables, with the intention of including confounding variables in the analysis. Ultimately there were no confounding variables, which gives confidence in the validity of the findings.

To create a statistically usable measure, we collapsed different types of supervision and support into one matrix, prioritizing the model with the best evidence-base for supervision of helping professions working with psychological trauma: individual and small-group supervision with an appropriately qualified supervisor (Azar, 2000; Bell *et al.*, 2003; Sommer, 2008; Knight, 2013). In doing so, we de-prioritized the lesser-evidenced Reflective Practice Groups, Communities of Practice, or Case Review Groups (Cockersell, 2011; Anderson *et al.*, 2013). Consequently, the matrix used for this study may not fully reflect the therapeutic value of some of the newer forms of support. We were prevented from testing this categorically due to the multiple forms of supervision support that many participants were receiving. Further investigation is needed to explore the most effective way of delivering these interventions and measuring their impact, especially as existing research has highlighted that there is a lack of evidence-based interventions to support staff who are experiencing compassion fatigue, burnout, or STS (Bober & Regehr, 2006; Bercier & Maynard, 2015).

The survey was open over a period of four months, and was viewed 1210 times, yet only 112 people completed the entire survey, a response rate of under 10% (without controlling for multiple views by same individuals). This suggests that despite active recruitment across

homelessness services throughout the UK via email and social media, uptake on the study was quite low. It is likely that taking the time to respond to this survey was simply not a priority for busy practitioners in frontline services. However, this means that the survey shows a certain level of selection bias. Survey designs typically attract low response rates. Similar to qualitative designs, participants may be characterized by their willingness to volunteer their time and effort rather than by their ‘typicality’. It is important then that findings derived from such designs are confirmed through studies with more resource-intensive and systematic sampling methods such as controlled or cohort designs.

Implications for theory, policy and practice

While the sample did not show the anticipated levels of burnout and STS, they showed significantly elevated levels of depression and stress. However, theory around professional identity (Geoffrion *et al.*, 2016) offers a potential explanation for the comparatively low rates of STS by suggesting that when practitioners take on their role, they work within a cognitive framework based on their knowledge of the situation and antecedents that allows them to instinctively assign meaning to work-related stressful situations and interpret and react to situations accordingly (Stryker, 2004; Geoffrion *et al.*, 2016). In turn, this helps to modulate compassion fatigue and alter how distress is experienced in the work place (Åkerström, 2002; Geoffrion *et al.*, 2016). The role conflicts inherent within the practitioner job description may also pose challenges for professional identity, for instance in the contrast between caregiving and supporting versus imposing boundaries and challenging difficult behavior. (Evans *et al.*, 2005; Geoffrion *et al.*, 2016). For this particular population, compassion satisfaction may be particularly protective against developing psychological distress, as has previously been suggested by some researchers (Stamm, 2002; Conrad & Kellar-Guenther, 2006; Merriman, 2015). As correlational analysis of the subscales indicated that higher levels of compassion

satisfaction are associated with lower levels of burnout, STS, depression, and stress, this theory may have merit, but longitudinal research would be required to confirm this.

Whilst compassion satisfaction has a potentially protective function, research suggests that supporting people who are rarely valued in society (homeless people, drug users, people on benefits, etc.) can lead to a certain “glamorization of violence” (Pearlman & Saakvitne, 1995) and normalization of tragedy, where difficult situations become the norm and workplace negativity increases easily, increasing compassion fatigue and lowering staff morale unless preventative measures are in place (Osofsky *et al.*, 2008; Pross & Schweitzer, 2010).

Of the sample, 68% ($N = 71$) mentioned organizational support structures as part of the way that they or their organization maintained good mental health. Considering the effects that supervision has been shown to have on practitioner mental health (Ben-Porat & Itzhaky, 2011; Williams *et al.*, 2012; Knight, 2013; Merriman, 2015), especially when it involves intentional discussion around the supervisee’s emotional state (Azar, 2000; Sommer, 2008; Etherington, 2009; Knight, 2013), prioritizing regular and uninterrupted supervision is essential. Most participants (87.5%, $N = 98$) received supervision with their line manager, meaning they may be less willing to openly discuss challenges out of concern for possible repercussions on their position. Peer support (39%; $N = 41$) was the most frequently mentioned way of maintaining good mental health, followed by supervision (29%, $N = 30$). Training certain team members to deliver peer-led supervision or debriefing, similar to RPG, or modelling supervision on disciplines such as clinical psychology, where supervisors are typically not line managers, may be more effective (Dooley & Peyton-Lander, 2014).

Shifts in funding structures and broader structural changes that consider evidence on the most effective approaches to addressing chronic homelessness, unemployment, poverty, and health inequalities would be beneficial in the longer term. This research also highlights the need for earmarked funds that go directly to supporting staff mental health and well-being, as

well as rectifying the cuts in specialist provision for homeless people in the UK, especially in respect to mental health (Fitzpatrick *et al.*, 2017; Lucas *et al.* 2018; St Mungo's, 2016). The long-term economic costs of not providing mental health care more generally have been widely documented (e.g. Trautmann *et al.*, 2016), but the phenomenon of indirect costs is particularly acute in the homelessness sector. Here individuals with untreated severe and enduring mental illness are less able to access limited services and more likely to self-medicate with illicit substances (Narendorf *et al.*, 2017). This further compromises their own health, leads to further social exclusion, increases risk for staff working with them and feeds organized crime, outcomes with economic and ethical implications. Consequently, homelessness workers may feel compelled to provide additional support for mental health without the necessary training or service infrastructure.

Within this context staff well-being should not be overlooked so that frontline workers can perform optimally, turnover can be reduced (Franklin, 2014; Kim and Kao, 2014), and services can successfully meet outcomes and effectively support their service users to ensure the interventions they provide do not inadvertently compound or repeat previous negative and traumatic experiences, but provide reparative opportunities for the service user. Given the apparently substantial attention paid to supervision and the persisting high levels of anxiety and stress, yet the lack of clear association between the two, consideration needs to be given to methodology and variables in future studies. Whilst controlled trials may help establish which type of support works best for what homelessness setting, the inherent complexity of the relationship between staff wellbeing, professional identity, homeless individuals' needs and the socio-political context demands nuanced and detailed examination through qualitative methodologies such as ethnography (e.g. Hill, 2002), thematic field analysis and micro-analysis (e.g. Archard & Murphy, 2015; Chamberlayne, 2004) and grounded theory (e.g. Samiley, 2016).

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References

Adams, R.E., Boscarino, J.A. & Figley, C.R. (2006) Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry*, 76 (1), pp.103–108.

Åkerström, M. (2002) Slaps, Punches, Pinches—But not Violence: Boundary-Work in Nursing Homes for the Elderly. *Symbolic Interaction*, 25 (4), pp.515–536.

Anderson, S., Hennessy, C., Cornes, M. & Manthorpe, J. (2013) Developing inter-disciplinary and inter-agency networks: reflections on a ‘community of practice’ approach. *Advances in Dual Diagnosis*, 6 (3), pp.132–144.

Anon (2017) *Children and Family Social Worker Workforce Collection 2015-2016*.

Sheffield, Department for Education. Available from:

<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/591914/SFR_08-2017_Main_Text.pdf>.

Anon DASS FAQ [Internet]. Available from:

<http://www2.psy.unsw.edu.au/dass/DASSFAQ.htm#_1.____What_does_the_DASS_measure,_and> [Accessed 15 July 2017].

Archard, P. J., & Murphy, D. (2015). A practice research study concerning homeless service user involvement with a programme of social support work delivered in a specialised psychological trauma service. *Journal of Psychiatric & Mental Health Nursing*, 22, 360-370.

Azar, S.T. (2000) Preventing Burnout in Professionals and Paraprofessionals Who Work with Child Abuse and Neglect Cases: A Cognitive Behavioral Approach to Supervision. *Psychotherapy in Practice*, 56 (6), pp.643–663.

Baird, K. & Kracen, A.C. (2006) Vicarious traumatization and secondary traumatic stress: A research synthesis*. *Counselling Psychology Quarterly*, 19 (2), pp.181–188.

Bell, H., Kulkarni, S. & Dalton, L. (2003) Organizational prevention of vicarious trauma. *Families in Society: The Journal of Contemporary Social Services*, 84 (4), pp.463–470.

Bender, K.A., Thompson, S.J., Ferguson, K.M., Yoder, J.R. & Kern, L. (2014) Trauma among street-involved youth. *Journal of Emotional and Behavioral Disorders*, 22 (1), pp.53–64.

Ben-Porat, A. & Itzhaky, H. (2011) The Contribution of Training and Supervision to Perceived Role Competence, Secondary Traumatization, and Burnout Among Domestic Violence Therapists. *The Clinical Supervisor*, 30 (1), pp.95–108.

Bercier, M.L. & Maynard, B.R. (2015) Interventions for Secondary Traumatic Stress With Mental Health Workers: A Systematic Review. *Research on Social Work Practice*, 25 (1), pp.81–89.

Berzoff, J. & Kita, E. (2010) Compassion Fatigue and Countertransference: Two Different Concepts. *Clinical Social Work Journal*, 38 (3), pp.341–349.

Bober, T. & Regehr, C. (2006) Strategies for Reducing Secondary or Vicarious Trauma: Do They Work? *Brief Treatment and Crisis Intervention*, 6 (1), pp.1–9.

Bride, B.E. (2007) Prevalence of secondary traumatic stress among social workers. *Social work*, 52 (1), pp.63–70.

Bride, B.E. (2004) The Impact of Providing Psychosocial Services to Traumatized Populations. *Stress, Trauma, and Crisis*, 7, pp.29–46.

Buhrich, N., Hodder, T. & Teesson, M. (2000) Lifetime prevalence of trauma among homeless people in Sydney. *Australian and New Zealand Journal of Psychiatry*, 34, pp.963–966.

Carmona, J. (2013) The Effects of Trauma Events on Substance Use and Depressive Symptoms among Homeless Youth. The Ohio State University. Available from: <http://rave.ohiolink.edu/etdc/view?acc_num=osu1356019823> [Accessed 25 January 2016].

Chamberlayne, P., 2004. Emotional retreat and social exclusion: Towards biographical methods in professional training. *Journal of Social Work Practice*, 18(3), pp.337-350.

Cockersell, P. (2011) More for less? Using PIEs and recovery to improve efficiency in supported housing. *Housing, Care and Support*, 14 (2), pp.45–50.

Connelly, R., Gayle, V. & Lambert, P.S. (2016) A review of educational attainment measures for social survey research. *Methodological Innovations*, 9, p.2059799116638001.

Conrad, D. & Kellar-Guenther, Y. (2006) Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse & Neglect*, 30 (10), pp.1071–1080.

Cornes, M., Manthorpe, J., Hennessy, C. and Anderson, S., 2013. Little Miracles: Using Communities of Practice to Improve Front Line Collaborative Responses to Multiple Needs and Exclusions. *London: Revolving Doors Agency and King's College London*.

Craig, C. & Sprang, G. (2010) Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, and Coping*, 23 (3), pp.319–339.

- Crawford, J.R. & Henry, J.D. (2003) The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology*, 42 (2), pp.111–131.
- Crawford, J., Cayley, C., Lovibond, P. F., Wilson, P. H., & Hartley, C. (2011). Percentile norms and accompanying interval estimates from an Australian general adult population sample for self-report mood scales (BAI, BDI, CRSD, CES-D, DASS, DASS-21, STAI-X, STAI-Y, SRDS, and SRAS). *Australian Psychologist*, 46(1), 3-14.
- Dahm, J., Wong, D. & Ponsford, J. (2013) Validity of the Depression Anxiety Stress Scales in assessing depression and anxiety following traumatic brain injury. *Journal of Affective Disorders*, 151 (1), pp.392–396.
- Dearth, T., M. (2015) Relationship Between Trauma-Related Stress and Coping Strategies of Mental Health Providers to the Homeless. University of La Verne.
- Deck, S.M. & Platt, P.A. (2015) Homelessness Is Traumatic: Abuse, Victimization, and Trauma Histories of Homeless Men. *Journal of Aggression, Maltreatment & Trauma*, 24 (9), pp.1022–1043.
- Dooley, C. & Peyton-Lander, T. (2014) *DCP Policy on Supervision*. Leicester, British Psychological Society. Available from: <http://www.bps.org.uk/system/files/Public%20files/inf224_dcp_supervision.pdf> [Accessed 10 August 2017].
- Dorrian, J., Grant, C. & Banks, S. (2017) An industry case study of ‘stand-up’ and ‘sleepover’ night shifts in disability support: Residential support worker perspectives. *Applied Ergonomics*, 58, pp.110–118.

Etherington, K. (2009) Supervising helpers who work with the trauma of sexual abuse.

British Journal of Guidance & Counselling, 37 (2), pp.179–194.

Evans, S., Huxley, P., Webber, M., Katona, C., Gately, C., Mears, A., Medina, J., Pajak, S. &

Kendall, T. (2005) The impact of ‘statutory duties’ on mental health social workers in the UK. *Health & Social Care in the Community*, 13 (2), pp.145–154.

Figley, C.R., 2002. Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of clinical psychology*, 58(11), pp.1433-1441.

Figley, C.R. (1995) Compassion fatigue: Toward a new understanding of the costs of caring.

In: *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators*.

Baltimore, MD, US, The Sidran Press, pp.3–28.

Figley, C.R. & Stamm, B.H. (1996) Psychometric Review of Compassion Fatigue Self Test.

In: B. H. Stamm ed. *Measurement of Stress, Trauma and Adaptation*. Baltimore, Sidran Press.

Fitzpatrick, S., Bramley, G., & Johnson, S., 2012. Multiple Exclusion Homelessness in the UK.

An Overview of Key Findings for the MWG. Available from:

<http://niko.aides63.free.fr/Documents/Doro/Dissert/Multiple%20exclusion%20Homelessness%20across%20the%20UK%20survey.pdf>

Fitzpatrick, S., Pawson, H., Bramley, G., Wilcox, S. & Watts, B. (2015) *The homelessness*

monitor: Scotland 2015. Institute for Social Policy, Housing, Environment and Real Estate (I-SPHERE), Heriot-Watt University. Available from:

<http://www.crisis.org.uk/data/files/publications/HomelessnessMonitorScotland_FINAL.pdf

>.

Fitzpatrick, S., Pawson, H., Bramley, G., Wilcox, S., Watts, B., & Wood, J. (2017). The homelessness monitor: England 2017. *Homeless monitor. London: Crisis.*

Franklin, B., 2014. The Future Care Workforce. Briefing for the International Longevity centre UK. Available at: <https://eprints.soton.ac.uk/187695/1/meeting-the-psychological-and-emotional-needs-of-people-who-are-homeless.pdf>

Geoffrion, S., Morselli, C. & Guay, S. (2016) Rethinking Compassion Fatigue Through the Lens of Professional Identity: The Case of Child-Protection Workers. *Trauma, Violence, & Abuse*, 17 (3), pp.270–283.

Henry, J.D. & Crawford, J.R. (2005) The short-form version of the Depression Anxiety Stress Scales (DASS-21): construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44 (2), pp.227–239.

Hensel, J.M., Ruiz, C., Finney, C. & Dewa, C.S. (2015) Meta-Analysis of Risk Factors for Secondary Traumatic Stress in Therapeutic Work With Trauma Victims. *Journal of Traumatic Stress*, 28 (2), pp.83–91.

Hesse, A.R. (2002) Secondary trauma: How working with trauma survivors affects therapists. *Clinical Social Work Journal*, 30 (3), pp.293–309.

Hill, R.P., 2002. Service Provision through Public-Private Partnerships: An Ethnography Ofservice Delivery to Homeless Teenagers. *Journal of Service Research*, 4(4), pp.278-289.

Hopper, E.K., Bassuk, E.L. & Olivet, J. (2009) Shelter from the Storm: Trauma-Informed Care in Homelessness Services Settings. *The Open Health Services and Policy Journal*, 2, pp.131–151.

Kanno, H. (2010) Supporting indirectly traumatized populations: The need to assess secondary traumatic stress for helping professionals in DSM-V. *Health and social work*, 35 (3), p.225.

Keats, H., Maguire, N., Johnson, R. & Cockersell, P. (2012) *Psychologically informed services for homeless people: Good Practice Guide*. Available from: <https://eprints.soton.ac.uk/340022/1/Good%2520practice%2520guide%2520-%2520%2520Psychologically%2520informed%2520services%2520for%2520homeless%2520people%2520.pdf> [Accessed 30 July 2017].

Kim, H., Ji, J. & Kao, D. (2011) Burnout and Physical Health among Social Workers: A Three-Year Longitudinal Study. *Social Work*, 56 (3), pp.258–268.

Kim, H., Kao, D. (2014) A Meta-Analysis of Turnover Intention Predictors among U.S. Child Welfare Workers. *Children and Youth Services Review*, 47 (1), pp.214-223.

Knight, C. (2008) Indirect Trauma: An Occupational Hazard. In: *Introduction to Working with Adult Survivors of Childhood Trauma: Techniques and Strategies*. Cengage Learning.

Knight, C. (2013) Indirect Trauma: Implications for Self-Care, Supervision, the Organization, and the Academic Institution. *The Clinical Supervisor*, 32 (2), pp.224–243.

Kulkarni, S., Bell, H., Hartman, J.L. & Herman-Smith, R.L. (2013) Exploring Individual and Organizational Factors Contributing to Compassion Satisfaction, Secondary Traumatic Stress, and Burnout in Domestic Violence Service Providers. *Journal of the Society for Social Work and Research*, 4 (2), pp.114–130.

Levy, J.S. & Johnson, R. (Eds.). (2018). *Cross-cultural Dialogues on Homelessness: From Pretreatment Strategies to Psychologically Informed Environments*. Ann Arbor, MI: Loving Healing Press.

Lloyd, C., King, R. & Chenoweth, L. (2002) Social work, stress and burnout: A review. *Journal of Mental Health*, 11 (3), pp.255–265.

Lovibond, S.H. & Lovibond, P.F. (1995) *Manual for the Depression Anxiety Stress Scales*. 2nd ed. Sydney, Psychology Foundation.

Lucas, S., Archard, P. J., Tangen, J., & Murphy, D. (2018). Arrangements for adult service users who are homeless in English mental health trusts. *Mental Health Review Journal*, 23, 64-71.

St Mungo's. (2016). *Stop the scandal: An Investigation into mental health and rough sleeping*, available at: www.mungos.org/publication/stop-scandal-investigation-mental-health-rough-sleeping/

McDonagh, T., 2011. Tackling homelessness and exclusion: understanding complex lives. *York: Joseph Rowntree Foundation*.

MEAM & Calouste Gulbenkian Foundation (2015) *Individuals with multiple needs: the case for a national focus*. London.

Merriman, J. (2015) Enhancing Counselor Supervision Through Compassion Fatigue Education. *Journal of Counseling & Development*, 93 (3), pp.370–378.

Mullen, J. & Leginski, W. (2010) Building the Capacity of the Homeless Service Workforce. *The Open Health Services and Policy Journal*, 3, pp.101–110.

Narendorf, S. C., Cross, M. B., Santa Maria, D., Swank, P. R., & Bordnick, P. S. (2017). Relations between mental health diagnoses, mental health treatment, and substance use in homeless youth. *Drug and alcohol dependence*, 175, 1-8.

National Statistics (2017) *Homelessness in Scotland: 2016-2017*. Scotland, Scottish Government. Available from: <<http://www.gov.scot/Resource/0052/00521186.pdf>> [Accessed 26 July 2017].

Nieuwenhuijsen, K., de Boer, A.G.E.M., Verbeek, J.H. a. M., Blonk, R.W.B. & van Dijk, F.J.H. (2003) The Depression Anxiety Stress Scales (DASS): detecting anxiety disorder and depression in employees absent from work because of mental health problems. *Occupational and Environmental Medicine*, 60 Suppl 1, pp.i77-82.

Osofsky, J.D., Putnam, F.W. & Lederman, J.C.S. (2008) How to Maintain Emotional Health When Working with Trauma. *Juvenile and Family Court Journal*, 59 (4), pp.91–102.

Pearlman, L.A. (1995) Self-care for trauma therapists: Ameliorating vicarious traumatization. In: *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators*. Baltimore, MD, US, The Sidran Press, pp.51–64.

Pearlman, L.A. & MacIain, P.S. (1995) Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26, pp.558–565.

Pearlman, L.A. & Saakvitne, K.W. (1995) *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York, W. W. Norton & Co.

Posten, H.O. (1979) The robustness of the one-sample t-test over the pearson system. *Journal of Statistical Computation and Simulation*, 9 (2), pp.133–149.

Prestidge, J. (2014) Using Trauma-Informed Care to provide therapeutic support to homeless people with complex needs: a transatlantic search for an approach to engage the ‘non-engaging’. *Housing, Care and Support*, 17 (4), pp.208–214.

Pross, C. & Schweitzer, S. (2010) The culture of organizations dealing with trauma: Sources of work-related stress and conflict. *Traumatology*, 16 (4), pp.97–108.

Salloum, A., Kondrat, D.C., Johnco, C. & Olson, K.R. (2015) The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Children and Youth Services Review*, 49, pp.54–61.

Samiley, R. (2016). *Push-Pull Tensions: A Grounded Theory on Social Experience of Use of Healthcare Services Among Homeless Veterans* (Doctoral dissertation, UCLA).

Scanlon, C., & Adlam, J. (2011). 'Defacing the currency?': a group-analytic appreciation of homelessness, dangerousness, disorder and other inarticulate speech of the heart. *Group Analysis*, 44, 131-148.

Scanlon, C., & Adlam, J. (2012). The (dis) stressing effects of working in (dis) stressed homelessness organisations. *Housing, Care and Support*, 15(2), 74-82.

Schneider, S. (2011) Survey Question Bank Topic Overview 6: Measuring Educational Attainment. Available from:

<https://www.ukdataservice.ac.uk/media/262853/discover_sqb_education_schneider.pdf>

[Accessed 10 August 2017].

Smith, G. (2008). Does gender influence online survey participation?: A record-linkage analysis of university faculty online survey response behavior. *ERIC Document Reproduction Service No. ED 501717*.

Sommer, C.A. (2008) Vicarious Traumatization, Trauma-Sensitive Supervision, and Counselor Preparation. *Counselor education and supervision*, 48 (1), pp.61–71.

Soper, D.S. (2017) *A-priori Sample Size Calculator for Multiple Regression*. Available from: <<http://www.danielsoper.com/statcalc>> [Accessed 7 October 2017].

Sprang, G., Clark, J. & Whitt-Woosley, A. (2007) Compassion Fatigue, Compassion Satisfaction, and Burnout: Factors Impacting a Professional's Quality of Life. *Journal of Loss and Trauma*, 12 (3), pp.259–280.

Stamm, B. H., 2002: Measuring compassion satisfaction as well as fatigue: Developmental history of the Compassion Satisfaction and Fatigue Test. Treating compassion fatigue. Brunner-Routledge, New York, pp. 107–119

Stamm, B.H. (2010) *The concise ProQOL manual*. Pocatello, ID: ProQOL. org. Available from: <http://proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf> [Accessed 2 April 2017].

Stanley, N., Manthorpe, J. & White, M. (2007) Depression in the Profession: Social Workers' Experiences and Perceptions. *British Journal of Social Work*, 37, pp.281–298.

Stryker, S. (2004) Integrating emotion into identity theory. In: J. H. Turner ed. *Theory and Research on Human Emotions*. Advances in Group Processes. Emerald Group Publishing Limited, pp.1–23. Available from: <<http://www.emeraldinsight.com/doi/abs/10.1016/S0882-6145%2804%2921001-3>> [Accessed 10 August 2017].

Thomas, J. (2013) Association of Personal Distress With Burnout, Compassion Fatigue, and Compassion Satisfaction Among Clinical Social Workers. *Journal of Social Service Research*, 39 (3), pp.365–379.

Ting, L., Jacobson, J.M. & Sanders, S. (2011) Current levels of perceived stress among mental health social workers who work with suicidal clients. *Social work*, 56 (4), pp.327–336.

Trautmann, Sebastian, Jürgen Rehm, and Hans-Ulrich Wittchen. "The economic costs of mental disorders: Do our societies react appropriately to the burden of mental disorders?." *EMBO reports* (2016): e201642951.

VanDeusen, K.M. & Way, I. (2006) Vicarious Trauma: An Exploratory Study of the Impact of Providing Sexual Abuse Treatment on Clinicians' Trust and Intimacy. *Journal of Child Sexual Abuse*, 15 (1), pp.69–85.

Wagaman, M.A., Geiger, J.M., Shockley, C. and Segal, E.A., 2015. The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social work*, 60(3), pp.201-209.

Williams, A.M., Helm, H.M. & Clemens, E.V. (2012) The Effect of Childhood Trauma, Personal Wellness, Supervisory Working Alliance, and Organizational Factors on Vicarious Traumatization. *Journal of Mental Health Counseling*, 34 (2), pp.133–153.

Wong, C.F., Clark, L.F. & Marlotte, L. (2016) The Impact of Specific and Complex Trauma on the Mental Health of Homeless Youth. *Journal of Interpersonal Violence*, 31 (5), pp.831–854.

Table 1: Demographic characteristics; sample breakdown for support; sample access to CPD

	<i>N</i>	Frequency (%)
Gender		
Female	73	65.2
Male	38	33.9
Prefer not to disclose	1	.9
Location		
Scotland	82	73.2
Rest of UK	28	25.0
Other	2	1.8
Job Title (<i>N</i> = 107)		
Health/social Care Professional	16	14.3
Manager	18	16.1
Practitioner	23	20.5
Senior Support Worker	8	7.1
Support Worker	42	37.5
Did not disclose	5	4.5
Educational background		
Vocational only	37	33
Academic only	32	28.6
Both vocational & academic	38	33.9
No relevant formal education	5	4.5

Total *N* = 112.

Table 2: Breakdown of frequency, size of group, and group facilitator/leader for each form of support reviewed

	Support & Supervision	Reflective Practice Group	Case Review Group	Community of Practice
Support Frequency				
Never	3.6% (<i>N</i> = 4)	25% (<i>N</i> = 28)	29.5% (<i>N</i> = 33)	67.9% (<i>N</i> = 76)
Occasionally	38.4% (<i>N</i> = 43)	38.4% (<i>N</i> = 43)	44.6% (<i>N</i> = 50)	17.9% (<i>N</i> = 20)
Monthly	49.1% (<i>N</i> = 55)	24.1% (<i>N</i> = 27)	14.3% (<i>N</i> = 16)	9.8% (<i>N</i> = 11)
Fortnightly	4.5% (<i>N</i> = 5)	8% (<i>N</i> = 9)	7.1% (<i>N</i> = 8)	.9% (<i>N</i> = 1)
Weekly	4.5% (<i>N</i> = 5)	4.5% (<i>N</i> = 5)	4.5% (<i>N</i> = 5)	3.6% (<i>N</i> = 4)
Size of group				
Individual	83% (<i>N</i> = 93)	1.8% (<i>N</i> = 2)	6.3% (<i>N</i> = 7)	.9% (<i>N</i> = 1)
2-4 people	2.7% (<i>N</i> = 3)	12.5% (<i>N</i> = 14)	16.1% (<i>N</i> = 18)	4.5% (<i>N</i> = 5)
5-8 people	2.7% (<i>N</i> = 3)	39.3% (<i>N</i> = 44)	25.9% (<i>N</i> = 29)	11.6% (<i>N</i> = 13)
8+ people	5.4% (<i>N</i> = 6)	7.1% (<i>N</i> = 8)	3.6% (<i>N</i> = 4)	7.1% (<i>N</i> = 8)
Variable	2.7% (<i>N</i> = 3)	11.6% (<i>N</i> = 13)	14.3% (<i>N</i> = 16)	8.0% (<i>N</i> = 9)
N/A	3.6% (<i>N</i> = 4)	27.7% (<i>N</i> = 31)	33.9% (<i>N</i> = 38)	67.9% (<i>N</i> = 76)
Support facilitator/leader				

Other practitioner	2.7% (<i>N</i> = 3)	15.2% (<i>N</i> = 17)	20.5% (<i>N</i> = 23)	14.3% (<i>N</i> = 16)
Team leader	87.5% (<i>N</i> = 98)	15.2% (<i>N</i> = 17)	22.3% (<i>N</i> = 25)	6.3% (<i>N</i> = 7)
Senior leader	4.5% (<i>N</i> = 5)	4.5% (<i>N</i> = 5)	4.5% (<i>N</i> = 5)	-
Clinical psychologist	.9% (<i>N</i> = 1)	33.9% (<i>N</i> = 38)	9.8% (<i>N</i> = 11)	.9% (<i>N</i> = 1)
External consultant	2.7% (<i>N</i> = 3)	3.6% (<i>N</i> = 4)	6.3% (<i>N</i> = 7)	6.3% (<i>N</i> = 7)
Other	-	1.8% (<i>N</i> = 2)	5.4% (<i>N</i> = 6)	2.7% (<i>N</i> = 3)
Total <i>N</i> = 112.				

Table 3: Participants falling within each cut-off score for ProQOL subscales

	Compassion Satisfaction (N = 111)	Burnout (N = 112)	Secondary Traumatic Stress (N = 110)
Low (0-22)	0 (0%)	46 (41.1%)	73 (65.2%)
Average (23-41)	80 (71.4%)	66 (58.9%)	37 (33%)
High (42+)	31 (27.7%)	0 (0%)	0 (0%)

Table 4: DASS sample and population means

Sub-scale	Population Mean (SD)* N=497	Sample Mean (SD) N=111	T-test t(df)
DASS Depression	2.57 (3.86)	3.57 (3.51)	2.517(607)**
DASS Anxiety	1.74 (2.78)	1.86 (2.65)	0.415(606)
DASS Stress	3.99 (4.24)	5.52 (3.93)	3.496(607)***
DASS Total	8.30 (9.83)	10.89 (8.92)	2.551(606)**

*Drawn from Crawford *et al.* (2011), ** $p < 0.05$, *** $p < 0.0005$,

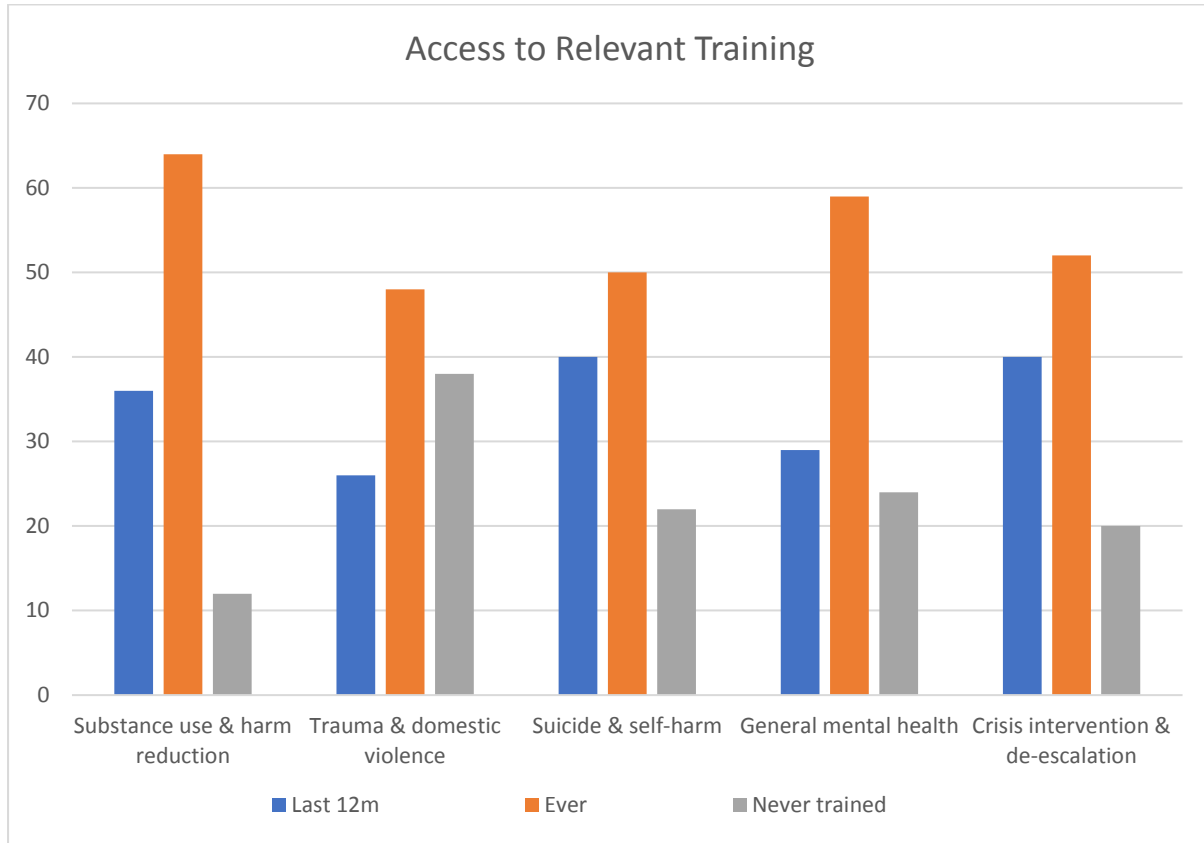
Table 5: Spearman's rho for ProQOL and DASS subscale items

	COMPASSION SATISFACTIO N	BURNOUT	STS	DEPRESSION	ANXIETY	STRESS
Compassion n	1					
Satisfaction n						
Burnout	-.649**	1				
STS	-.338**	.583**	1			
Depression	-.539**	.617**	.383*	1		
			*			
Anxiety	-.240*	.356**	.442*	.591**	1	
			*			
Stress	-.426**	.529**	.480*	.716**	.603**	1
			*			

NOTE: STS = Secondary Traumatic Stress, ** = Correlation is significant at the 0.01 level (2-tailed), * = Correlation is significant at the 0.05 level (2-tailed). List-wise $N = 108$.

Figure 1: History of accessing Continuing Professional Development

Total $N = 112$.



Supplementary Table 1: Scoring system for educational and vocational qualifications

SCQF Level	In progress/ Complete	SCQF Credits	Awarded score	Final points awarded
National Course/Skills for Work	In progress	3 – 6 (relevant qualifications usually at 5-6 level)	5	1
National Course/Skills for Work	Complete	3 – 6 (relevant qualifications usually at 5-6 level)	6	2
HNC/HND	In progress	7 – 8	7	3
HNC/HND	Complete	7 – 8	8	4
PDA	In progress	6 – 12 (relevant qualifications usually at 7-9 level)	8	4
PDA	Complete	6 – 12 (relevant qualifications usually at 7-9 level)	9	5
SVQ	In progress	4 – 11 (relevant qualifications usually at 6-9 level)	7.5	3.5
SVQ	Complete	4 – 11 (relevant qualifications usually at 6-9 level)	8.5	4
Graduate degree	In progress	9 – 10	9	5
Graduate degree	Complete	9 – 10	10	6
Postgraduate degree	In progress	11 – 12	11	7
Postgraduate degree	Complete	11 – 12	12	8
None	-	-	0	0

Key: SCQF = Scottish Credits & Qualifications Framework; HNC/HND = Higher National Certificate/Diploma; PDA = Professional Development Award; SVQ = Scottish Vocational Qualification.

Supplementary Table 2: Matrix of scores based on support frequency and size of group

Score calculated as SupportQuality = (SupportFrequency x SupportSize) +

LeaderBonus

<i>Group size</i>	<i>N/A</i>	<i>Variable</i>	<i>8+ people</i>	<i>5-8 people</i>	<i>2-4 people</i>	<i>Individual</i>
<i>Frequency</i>	<i>0 points</i>	<i>1 point</i>	<i>2 point</i>	<i>3 points</i>	<i>4 points</i>	<i>5 points</i>
<i>Never</i>	0x0	0x1	0x2	0x3	0x4	0x5
<i>0 points</i>	0		0	0	0	0
<i>Occasional</i>	1x0	1x1	1x2	1x3	1x4	1x5
<i>1 point</i>	0	1	2	3	4	5
<i>Monthly</i>	2x0	2x1	2x2	2x3	2x4	2x5
<i>2 points</i>	0	2	4	6	8	10
<i>Fortnightly</i>	3x0	3x1	3x2	3x3	3x4	3x5
<i>3 points</i>	0	3	6	9	12	15
<i>Weekly</i>	4x0	4x1	4x2	4x3	4x4	4x5
<i>4 points</i>	0	4	8	12	16	20

Leader bonus calculated as:

N/A = + 0 points

Other practitioner; “other” leading session = + 1 point

Team leader; supervisor who is not my line manager leading session = + 2 points

Clinical psychologist; external consultant leading session = + 3 points